## Annual Drinking Water Quality Report South Woodford Water District

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. We purchase our water from the City of Versailles, which is treated surface water from the Kentucky River.

This report shows our water quality and what it means. If you have any questions about this report or concerning your water utility, please contact George Withers at 859-873-1308. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the second Tuesday of each month at 5:00 p.m. at 117-D Crossfield Drive, Versailles, Ky.

The water supply for the South Woodford Water District comes from the City of Versailles, which is treated surface water from the Kentucky River. Based on the assessment, our level of susceptibility was determined to be moderate. Potential sources of contamination in the source water area include agricultural runoff and two bridges that span the river where accidents may occur,. The complete source water assessment plan can be viewed at the Versailles Municipal Utilities office at 196 South Main Street, Monday through Friday 8am – 4pm.

South Woodford Water District routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup> 2012.

The sources of drinking water, both tap and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and may pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include: 1) Microbial contaminants, such as virus and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock and wildlife: 2) Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban storm runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming: 3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm runoff, and residential uses: 4) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and 5) Radioactive contaminants which can be naturally-occurring or be the result of oil and gas production and mining activities. To ensure that tap water is safe to drink, the United States Environmental Protection Agency (E.P.A.) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (F.D.A.) regulation establish limits for contaminants in bottled water that shall provide the same protection for public health.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions,

Non-Detects (ND) - analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l)- one part per million corresponds to one minute in two years or a single penny in \$10,000,

Parts per billion (ppb) or Milligrams per liter (mg/l)- One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000.

Million Fibers per Liter (MFL)- million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers

Action Level- the concentration of a contaminant, which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) (mandatory language)- A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (mandatory language)- The "Goal" (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGS allow for a margin of safety.

The data presented in this report are the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State (Ky. Division of Water) has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in this table, though representative, is more than one year old. Unless otherwise noted, the report level is the highest level detected. Most of reporting data comes from the City of Versailles (PWWSID # KY1200439). The only sampling done by the South Woodford Water District (PWSID #KY1200411) is for Asbestos, Copper, and Lead.

		Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation Y/N	Likely Source		
	Turbidity	Never more than 1 NTU Less	0.12	100%	N	Soil Runoff		
ŀ	(NTU) TT	than 0.3 NTU 95% of						
İ		samples each month						

## **INORGANIC CONTAMINANTS**

Contaminant [code]} (units)	MCL	MCLG	Report Level	Range	Date of Sample	Violation Y/N	Likely Source of Contamination	
Asbestos (MFL)	7	7	0.2	7-	10/1998	N	Decay of asbestos cement water mains: erosion of natural deposits	
Copper [1022] (ppm) (0 sites exceeding the AL)	AL=1.3	13 1.3 .000693 8/19/11 N percentile		N	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.			
Fluoride [1025] (ppm)	4	4	.92	0.8 1.12	Sept., 2012	N	Erosion of natural deposits; water additive which promotes strong teeth, discharge from fertilizer and aluminum factories.	
Lead [1030] (ppb) (0 sites exceeded the AL)	AL+15	0	0.015 (90% percentile)	1.002	8/19/2011	N	Corrosion of household plumbing systems; erosion of natural deposits.	
Nitrate (as nitrogen) [1040] (ppm)	10	10	0.760	0.76 0.76	Feb. 2012	N	Runoff from fertilizer use; leaching from septic tanks, sewage. Erosion of natural deposits.	
Barium {1010} (ppm)	2	2	0.017	0.017 to 0.017	Feb.2012	N	Drilling wastes; metal refineries; erosion of natural deposits	

## Radioactive Contaminants

Alpha emitters (4000) (Ci/L)	15	0	3.30	3.3-3.3	Aug. 2010	N	Erosion of natural Deposits
Combined radium (pCi/L)	5	0	1.02	0.02-1.02	Aug. 2010	N	Erosion of natural Deposits
Uranium	30	0	1.01	1.01-1.01	Aug. 2010	N	Erosion of natural deposits

## Disinfectants/ Disinfectation Byproducts and Precursors

	Total	Organic	TT*	N/A	1.44	0.75	2011	N	Naturally pre-	sent	in	the
1	Carbon	(ppm),			(lowest	2.37			environment			
1	but report	ted as a			average)	(monthly						
	ratio				_	ratios)						

Monthly ratio is the % TOC removal acvhieved to the % TOC removal required. Annual average of the montly ratios must be 1.00 or greater for compliance.

Chloramines (ppm)	MRDL =4	MRD LG =4	2.09 (highest average	0.72 to 3.8	N/A	NO	Water additive used to contraol microbes.
HAA ppb) (all sites) [Haloacetic acids]	60	N/A	18 (system average	Ito 30 (range of system sites)	N/A	No	Byproduct of drinking water disinfectant
TTHM (ppb) (all sites) [total Trihalomethane	80	N/A	32 (system average	12 to 52 (range of system sites)	2010	No	Byproduct of drinking water disinfection.